

Serial No. 10/707601

2

(GEMS 0229 PA)

**In the Claims:**

1. (Currently Amended) An x-ray assembly comprising:  
a target shaft;  
an x-ray target element mounted to said target shaft;  
a plurality of circumferential features formed in said x-ray target element; and  
at least one weight element adapted to be securable in any of a plurality of positions within one of said circumferential features such that said x-ray target element is balanced around said target shaft.
2. (Previously Amended) An x-ray assembly as described in claim 1, wherein one of said circumferential features comprises:  
a circumferential groove formed in said x-ray target element.
3. (Previously Amended) An x-ray assembly as described in claim 1, wherein one of said circumferential features is positioned around a perimeter surface of said x-ray target element.
4. (Previously Amended) An x-ray assembly as described in claim 1, wherein one of said circumferential features is positioned around an x-ray facing surface of said x-ray target element.
5. (Previously Amended) An x-ray assembly as described in claim 1, wherein said x-ray target element comprises:  
a central neck portion extending from an x-ray facing surface along an inner x-ray target diameter, one of said circumferential features formed onto said central neck portion.
6. (Previously Amended) An x-ray assembly as described in claim 1, wherein one of said circumferential features comprises:  
an entry port formed in said circumferential feature, said entry port allowing said at least one weight element to be inserted into said circumferential feature.
7. (Cancelled)
8. (Currently Amended) An x-ray assembly comprising:

Serial No. 10/707601

3

(GEMS 0229 PA)

a target shaft;

an x-ray target element mounted to said target shaft;

a circumferential feature formed in said x-ray target element; and

at least one weight element adapted to be securable in a plurality of positions within said circumferential feature such that said x-ray target element is balanced around said target shaft, said circumferential feature comprising a flange element positioned around and protruding from a perimeter surface of said x-ray target element; and

a plurality of mounting bores positioned along said flange element, said at least one weight element securable within any of said plurality of mounting bores.

9. (Previously Amended) An x-ray assembly as described in claim 1, wherein one of said circumferential features comprises:

a circumferential securing elbow slot, said at least one weight element including a securing elbow adapted to fit within said circumferential securing elbow slot and secure said at least one weight element within said circumferential feature.

10. (Original) An x-ray assembly as described in claim 9, wherein said circumferential securing elbow slot comprises a t-shaped slot.

11. (Original) An x-ray assembly as described in claim 9, wherein said circumferential securing elbow slot comprises a triangular slot.

12. (Original) An x-ray assembly as described in claim 2, wherein said at least one weight element comprises:

an expandable weight assembly including an expansion bore and an expansion screw, said expansion screw expanding said expandable weight assembly to secure said at least one weight element within said circumferential groove.

13. (Previously Amended) An x-ray target assembly comprising:

an x-ray target element;

a feature formed on said x-ray target element, said feature adapted to receive a weight element; and

Serial No. 10/707601

4

(GEMS 0229 PA)

at least one weight element adapted to be securable in a plurality of positions on said feature such that said x-ray target element is balanced around said target shaft.

14. (Previously Amended) An x-ray target assembly as described in claim 13, further comprising:

a circumferential groove formed in said x-ray target element.

15. (Original) An x-ray target assembly as described in claim 13, wherein said x-ray target element comprises:

a central neck portion extending from an x-ray facing surface along an inner x-ray target diameter, said feature formed onto said central neck portion.

16. (Original) An x-ray target assembly as described in claim 13, wherein said feature comprises:

a securing elbow slot, said at least one weight element including a securing elbow adapted to fit within said securing elbow slot and secure said at least one weight element within said feature.

17. (Original) An x-ray target assembly as described in claim 13, wherein said feature comprises:

a flange element positioned on said x-ray target element.

18. (Original) A method of balancing an x-ray target assembly, comprising: placing a weight element within a circumferential feature formed onto an x-ray target element;

positioning said weight element in a position along said circumferential feature that balances said x-ray target element; and

securing said weight element to said circumferential feature.

19. (Original) A method of balancing an x-ray target assembly as described in claim 18, further comprising:

forming a circumferential groove in said x-ray target element, said circumferential groove creating said circumferential feature.

Serial No. 10/707601

5

(GEMS 0229 PA)

20. (Previously Amended) A method of balancing an x-ray target assembly as described in claim 18, further comprising:

forming a circumferential flange on said x-ray target element, said circumferential flange creating said circumferential feature.